

**Applicant Name** Montana Department of Environmental Quality (DEQ)  
**Project Name** Belt Acid Mine Drainage (AMD) Mitigation

**Project Abstract**

The Belt AMD site, an abandoned coal mine, discharges an average of 150 gallons per minute (gpm) of very low pH water laden with iron, aluminum, chromium, cadmium, and other metals into Belt Creek. The Belt AMD results from two draining mine adits, the Anaconda Drain which produces ~140 gpm the Belt AMD and the French Coulee Drain which produces ~10 gpm.

The goal of a “source control” solution for the Belt AMD Mitigation project is to improve human health, the environment, and riparian habitat and aquatic life in Belt Creek. This goal would be accomplished by reducing the Belt AMD and metals loading to Belt Creek. Implementing the source control solution to the Belt AMD will be accomplished by reducing the groundwater recharge to the mine workings generating the Belt AMD via land-use changes, including crop change, horizontal well installation to dewater shallow aquifers above unflooded mine workings, and grouting selective mine workings locations to isolate flooded areas of the mine from partially or unflooded areas of the mine workings.

The abandoned underground Anaconda Coal Mine site is west of Belt, beneath agricultural land overlooking the Belt Creek drainage (Belt U.S. Geological Survey [USGS] 7.5 Minute Quadrangle). The site encompasses 5.5 square miles of mine workings, both flooded and unflooded by groundwater. Elevation at the Anaconda Coal Mine Site is from 3,600 feet to 3,900 feet above mean sea level. Legal description of the site is Township 19 North, Range 6 East, Sections 26, 27, 28, 32, and 33 of the Montana Principal Meridian. The drilling of the horizontal wells to dewater shallow aquifers over the unflooded portions of the mine workings and grouting selective mine workings to cut off groundwater flow paths within the mine is estimated to take approximately 300 work days, including drilling the horizontal wells, installing drain pipes, and drilling and grouting flow paths in the mine.